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# stret-to

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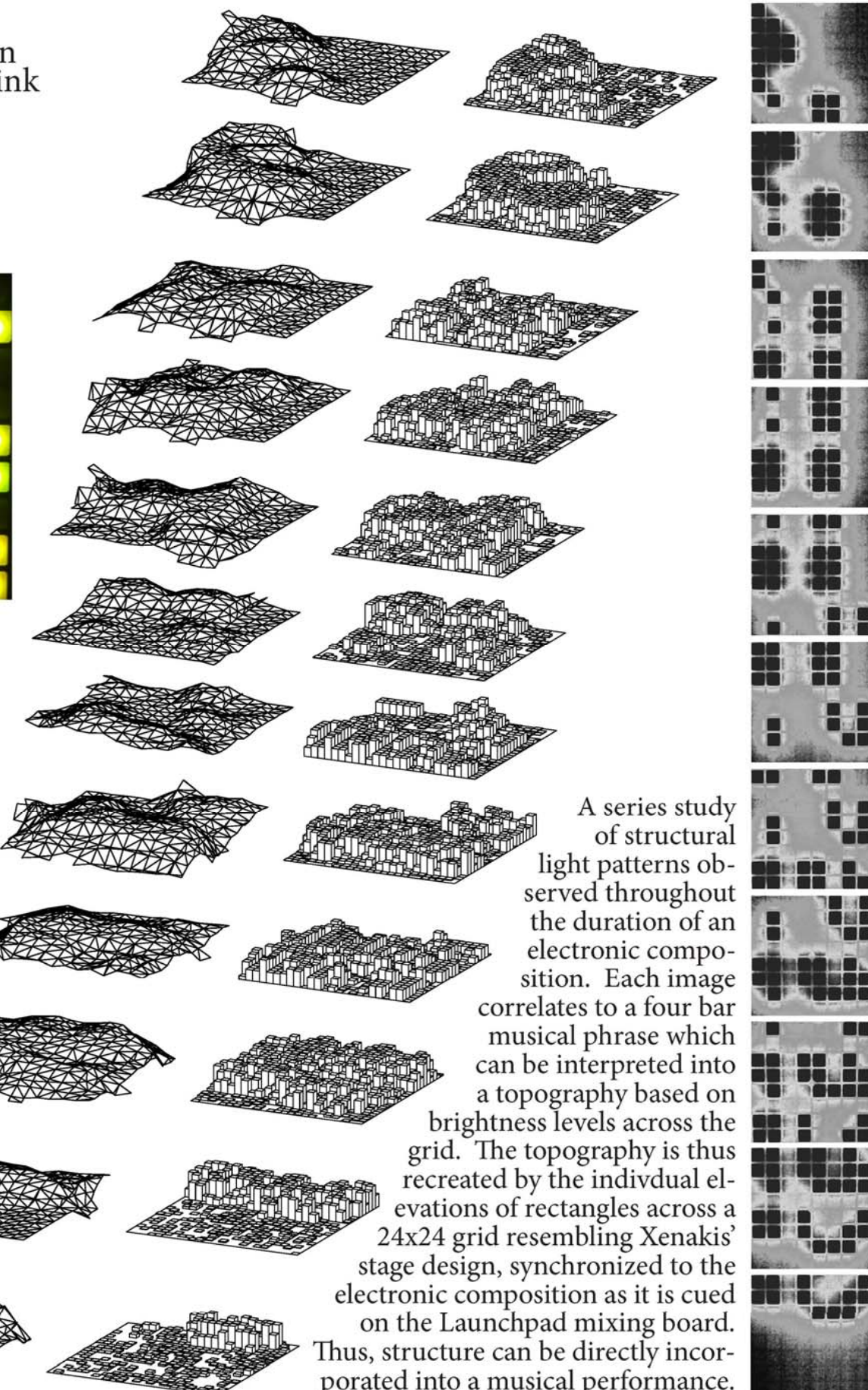
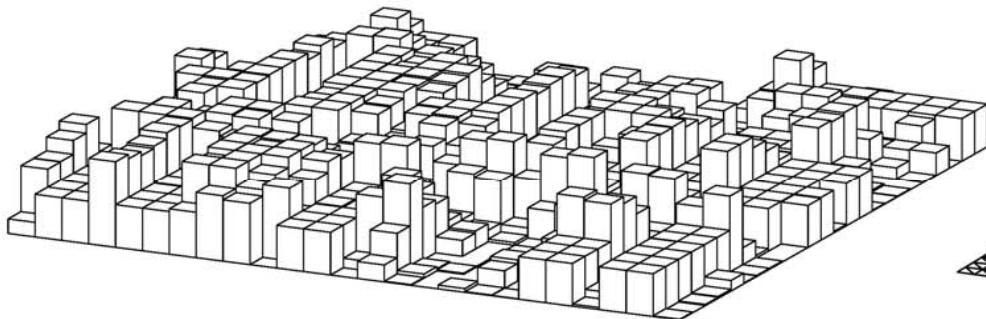
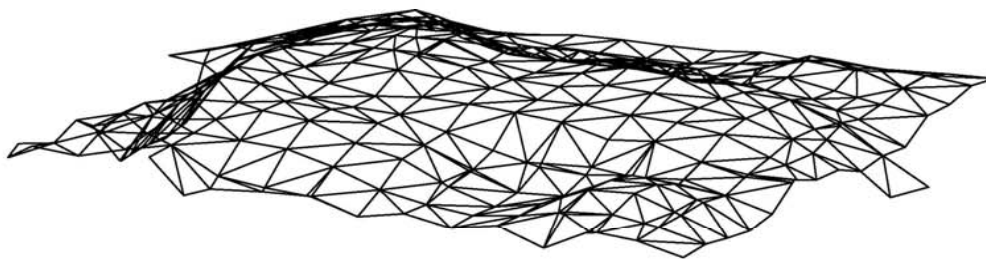
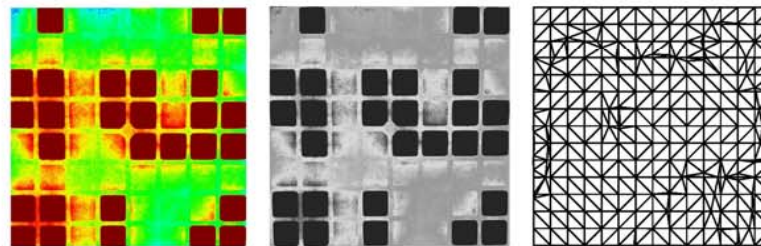
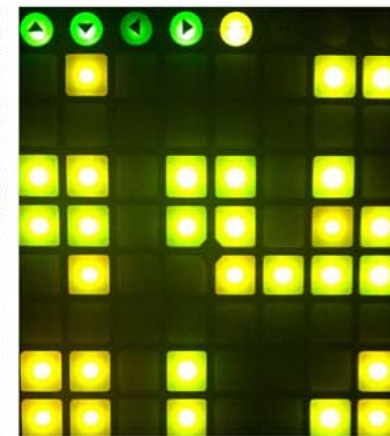


*A study* of the structural capabilities of electronic musical composition, inspired by the conceptual work of Iannis Xenakis and his design for the Cité de la Musique in Paris. In his design, Xenakis included specifications for an iconic gridded stage in which elevations of individual rectangular platforms could adjusted throughout a performance.

In an effort to expand on Xenakis' ideas with the use of modern scripting and music mixing technology, this study provides a link between music composition and elevation.

*stret-to (n) /stre-(.)tō/:*  
*The overlapping of two or more*  
*subject entries*  
*in*  
*time*

With the help of *Ableton Live* mixing software, a series of sonic variations are created through assorted combinations of eight recorded sound samples. Arranged and cued with the 8x8 Novation Launchpad light grid, each sample version is assigned a column, allowing for varied sample combinations along each row. Rows are cued in succession, causing the illuminated pattern of arranged samples to move vertically across the grid throughout the duration of the composition. The resulting light pattern can be translated into elevations with the use of bitmap scripting techniques found in the generative modeling program, Grasshopper.



A series study of structural light patterns observed throughout the duration of an electronic composition. Each image correlates to a four bar musical phrase which can be interpreted into a topography based on brightness levels across the grid. The topography is thus recreated by the individual elevations of rectangles across a 24x24 grid resembling Xenakis' stage design, synchronized to the electronic composition as it is cued on the Launchpad mixing board. Thus, structure can be directly incorporated into a musical performance.

*"All sound, even all continuous sonic variation, is conceived as an assemblage of a large number of elementary grains adequately disposed in time."*  
 -Iannis Xenakis, *Formalized Music*

*Davis Butner*

CURF Open House  
 September 11th, 2012

*seeking*  
*stretto*